

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 2023I
WWW.USDTO.GOV

EXAMINER'S AMENDMENT

- 1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
 - 2. Authorization for this examiner's amendment was given in a telephone interview with Shrinath Malur on January 28, 2010
 - 3. The applicant has been amended as follow:
- 1. (currently amended) An address translator to be coupled to a first network conforming to a first addressing system, and to be coupled to a second network conforming to a second addressing system, said address translator comprising:

a processor;

an address translating unit which translates, in a Layer 3 region of communication data, a Layer 3 address of the first addressing system into a Layer 3 address of the second addressing system, or translates, in a Layer 3 region of communication data, a Layer 3 address of the second addressing system into a Layer 3 address of the first addressing system;

a detecting unit which detects that the communication data conforms to a particular protocol based on a port number contained in a header corresponding to a Layer 4 region of the communication data; and

a creating unit which creates translation information including a correspondence relationship between the Layer 3 address of the first addressing system and the Layer 3 address of the second addressing system for translating a Layer 3 address contained in a region of the communication data higher than the Layer 3 region, when the detecting unit detects that the communication data conforms to the particular protocol, and

wherein the address translator further comprises a communication function communication mean for communicating with a server device,

wherein said address translator sends said translation information and the region of the communication data higher than the Layer 3 region to said server device, and receives information including said Layer 3 address described in the region of the communication data higher than the Layer 3 region which has been translated by said server device, and

wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.

- 2-19. (canceled).
- 20. (Currently amended) The address translator according to claim <u>1</u> 2, wherein said region of the communication data higher than the Layer 3 region comprises a parameter which requires translation of the region of the communication data higher than the Layer 3 region.

Art Unit: 2444

21. (previously presented) The address translator according to claim 20, wherein said

address translator sends the region of the communication data higher than the Layer 3 region

with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires the translation from the

region of the communication data higher than the Layer 3 region based on said tag which

requires the translation of the region of the communication data higher than the Layer 3 region.

22. (previously presented) The address translator according to claim 1, wherein in

case of that the first addressing system is Internet Protocol Version 4 (IPv4), the second

addressing system is Internet Protocol Version 6 (IPv6), and

wherein in case of that the first addressing system is IPv6 and the second addressing

system is IPv4.

23-24. (canceled).

25. (currently amended) An address translating system comprising:

an address translator, which is connected to a first network conforming to a first address

system and a second network conforming to a second addressing system; and

a server device, which is connected to a first conforming to a first address system and a

second network conforming to a second addressing system,

wherein the address translator comprises:

Art Unit: 2444

a processor:

an address translating unit which translates, in a Layer 3 region of communication data, a Layer 3 address of the first addressing system into a Layer 3 address of the second addressing system, or translates, in a Layer 3 region of communication data, a Layer 3 address of the second addressing system into a Layer 3 address of the first addressing system; and

a detecting unit which detects that the communication data conforms to a particular protocol based on a port number contained in a header corresponding to a Layer 4 region of the communication data; and

a creating unit which creates translation information including a correspondence relationship between the Layer 3 address of the first addressing system and the Layer 3 address of the second addressing system for translating a Layer 3 address contained in a region of the communication data higher than the Layer 3 region, when the detecting means detects that the communication data conforms to the particular protocol, and

wherein the address translator further comprises a communication function communication means for communicating with the server device,

wherein the address translator sends the translation information and the region of the communication data higher than the Layer 3 region to the server device, and receives information including the Layer 3 address described in the region of the communication data higher than the Layer 3 region which has been translated by the server device, and

wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.

Art Unit: 2444

26. (canceled).

- 27. (Currently Amended) The address translating system according to claim <u>25</u> 26, wherein the server device receives the translation information and the region of the communication data higher than the Layer 3 region from the address translator, and translates the Layer 3 address conforming to the first addressing system described in the region of the communication data higher than the Layer 3 region to a Layer 3 address conforming to the second addressing system based on the translation information, and sends information including the Layer 3 address described in the region of the communication data higher than the Layer 3 region which has been translated by the server device.
- 28. (previously presented) The address translating system according to claim 25, wherein the region of the communication data higher than the Layer 3 region, which is sent from the address translator to the server device, comprises:

a parameter which requires translation of the region of the communication data higher than the Layer 3 region of the communication data.

29. (previously presented) The address translating system according to claim 28, wherein the address translator sends the region of the communication data higher than the Layer 3 region with a tag added to the parameter which requires the translation of the region of the communication data higher than the Layer 3 region,

Art Unit: 2444

wherein the server device extracts the parameter which requires the translation from the region of the communication data higher than the Layer 3 region based on the tag.

30. (previously presented) The address translating system according to claim 25, wherein in the case of that the first addressing system is Internet Protocol Version 4 (IPv4), the second addressing system is Internet Protocol Version 6 (IPv6), and

wherein in the case of that the first addressing system is IPv6, the second addressing system is IPv4.

- 31. (previously presented) The address translating system according to claim 25, wherein the particular protocol is a Session Initiation Protocol (SIP).
- 32. (previously presented) The address translator according to claim 1, wherein the port number is described in a Transport layer as Layer 4.
- 33. (previously presented) The address translator according to claim 1, wherein the port number is described by Transmission Control Protocol (TCP) as Layer 4.
- 34. (previously presented) The address translator according to claim 1, wherein the port number is described by User Datagram Protocol (UDP) as Layer 4.

Art Unit: 2444

35. (previously presented) The address translator according to claim 1, wherein the port number is an identifier indicating that the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP).

36. (previously presented) The address translator according to claim 1, wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.

37-41. (canceled).

- 42. (previously presented) The address translating system according to claim 25, wherein the port number is described in a Transport layer as Layer 4.
- 43. (previously presented) The address translating system according to claim 25, wherein the port number is described by Transmission Control Protocol (TCP) as Layer 4.
- 44. (previously presented) The address translating system according to claim 25, wherein the port number is described by User Datagram Protocol (UDP) as Layer 4.
- 45. (previously presented) The address translating system according to claim 25, wherein the port number is an identifier indicating that the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP).

Art Unit: 2444

46. (canceled).

47. (new). The address translating system according to claim 25, wherein the server device includes a processing part for translating the Layer 3 address described in the region of the communication data higher than the Layer 3 region

4. Following is an examiner's statement of reasons for allowance:

With respect to claims 1, 20-22, 25, 27-36, 42-45, and 47, the prior art of record, individually or in combination, fails to teach, suggest or render obvious the claimed invention in combination with specific amended limitations as recited in claims 1 and 25.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

Art Unit: 2444

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *William Vaughn* can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THANH TAMMY NGUYEN/

Primary Examiner, Art Unit 2444

Application/Control Number: 10/081,535

Page 11

Art Unit: 2444